

LISTING OF THE CLAIMS

The following list of claims will replace all prior versions and listings of claims in the application:

1 (Previously presented): A method for fabricating microneedles, said method comprising:

- (a) providing a substrate material;
- (b) coating said substrate material with a first layer of a photoresist material;
- (c) coating said first layer of photoresist material with a second layer of photoresist material;
- (d) patterning said second layer of photoresist material with a plurality of microstructures by use of a photolithography procedure; and
- (e) separating said patterned first and second layer of photoresist material from said substrate material, thereby creating a microneedle structure comprised of said patterned photoresist material containing said plurality of microstructures.

2 (Previously presented): The method as recited in claim 1, wherein said microneedle structure comprises one of: (a) a plurality of solid protrusions, (b) a plurality of hollow protrusions forming through-holes, or (c) a plurality of hollow protrusions forming microcaps that do not extend entirely through said patterned photoresist material.

3 (Currently amended): The method as recited in claim 1, wherein ~~said photoresist material comprises a first layer and a second layer; said first layer of photoresist material is being cured before said second layer of photoresist material is applied; and said second layer being patterned by said photolithography procedure.~~

4 (Original): The method as recited in claim 1, further comprising: applying a layer of acid-dissolvable material between said substrate and said photoresist material at the commencement of said method, and during said step of separating the patterned photoresist material from the substrate, dissolving said acid-dissolvable material as a sacrificial layer.

5 (Original): The method as recited in claim 4, wherein said substrate comprises one of a silicon or a metallic substance, said photoresist material comprises SU-8, and said acid-dissolvable material comprises one of PDMS or silicon oxide.

6 (Original): The method as recited in claim 4, further comprising: creating break-away microneedles by briefly etching a portion of said plurality of microstructures proximal to a junction between a base structure and protrusions of the patterned photoresist material containing said plurality of microstructures, said base structure and said microstructure protrusions both being constructed of said photoresist material.

7 (Previously presented): The method as recited in claim 1, wherein the first of said photoresist layers being patterned with a first plurality of openings that are of a first size, the second of said photoresist layers being patterned with a second plurality of openings that are of a second size that is larger than said openings of said first size, said first and second plurality of openings being substantially in alignment with one another; and after said separation of the substrate from the patterned photoresist material, said plurality of microstructures comprises a plurality of microneedles having sharp tips.

8 (Original): The method as recited in claim 1, wherein said microneedle structure comprises a plurality of individual microneedles that have an aspect ratio of at least 3:1.

9-26 (Cancelled)